to England with my family. I had the rank of major and served as base dental surgeon (chief of dentistry) at Lakenheath and Mildenhall Air Force bases. We served the dental needs of rotating Air Force Wings, consisting of about 5,000 air force personnel who would remain on our bases for about three months and then fly home. This experience providing and recording on the dental services of a large group gave me the big picture and led to my decision to investigate the field of dental public health.

I followed up my military experience by applying to Columbia University School of Public Health and to the USPHS for a traineeship. Fortunately, I was accepted at Columbia and approved for the traineeship. This experience was the beginning of my dental public health career.

When I started training for the MPH degree in 1957, I thought I knew a lot about science and dental research, having had loads of chemistry and biology in my undergraduate training as well as the required courses in the dental curriculum. I though, like most of my dental colleagues, that all research was done in laboratories. But my studies of epidemiology and statistics gave me a completely new perspective on research.

Although research was not required at the city and county levels, almost from the start I began studies of caries prevalence, the effects of fluoridation, and dental manpower in the Cincinnati area. When I left Cincinnati for New York State, I worked for many

years with David Ast. Dr. Ast was very research oriented and always wanted to have at least one research project in progress. I worked with him on all the bureau's research projects that were going on at that time. He also encouraged me to start some research on my own. Among the research projects I worked on were: time and cost factors to provide regular, periodic dental care for children in fluoridated and nonfluoridated areas, the Albany topical fluoride study, an adhesive sealant trial that studied the effects of sealants in a fluoridated city, and a study on the effectiveness of dental hygienist teams in applying pit and fissure sealants.

Since 1945, New York State has been providing orthodontic services to children with physically handicapping malocclusions. In 1963 New York State conducted a study on the need for orthodontic care in the state. The New York study employed the Angle Index to assess need for orthodontic care.

In 1975 the Fédération Dentaire Internationale (FDI) and the World Health Organization (WHO) published a paper listing and defining occlusal traits that in their opinion were important in describing malocclusions. It was believed that psychosocial aspects of malocclusion should be incorporated in an orthodontic index.

At that time Cons and Jenny began the development of an orthodontic index, the DAI, that combined the physical and social aspects of malocclusion. They used the public's perceptions of each of 200 photographs of teeth and the FDI's method for measuring the physical traits of occlusion. The DAI is an orthodontic index that links the clinical and aesthetic traits of occlusion mathematically to produce a single score. Scores are obtained by measuring in the mouth 10 occlusal traits deemed to be important in describing malocclusions.

The Medicaid program started in 1966. One year into the program legislative leaders in New York State were shocked by the skyrocketing costs of the dental program. Having spent \$3 million per year prior to Medicaid, now they were faced with a \$300 million bill. The legislative leaders were ready to eliminate all dental care except for the relief of pain and infection. They were particularly concerned with the provision of prosthetic care. I urged them not to eliminate preventive and "routine" dental care. The legislators rewrote the law to include "preventive, prophylactic, and routine dental care" and to require prior approval for all prosthetic care. This new language allowed me to keep many dental services including amalgam fillings in the regulations that I subsequently wrote.

I want to thank my parents for encouraging their children to pursue higher education. I want to thank the city of New York for providing free education through the baccalaureate degree. I'd like to thank all my colleagues for their support throughout all my years in dental public health. I want to thank Joanna Jenny, my wife and colleague in research. Finally, I want to thank the awards committee for honoring me with this award.

1998 Distinguished Service Award: John K. Peterson, DDS, MPH

Presented by Robert J. (Skip) Collins, DDS, MPH

Our second Distinguished Service Award is presented to Dr. John K. Peterson. John is unable to be with us today due to ill health (although several of us tried mightily to persuade him to come).

John is a very special person whose role in clinical research trials is well known to those who have prepared for boards in dental public health. He is a 1945 DDS graduate of the University of Minnesota, where he also received his MPH in 1950. After five years of private dental practice and service in the Army Dental Corps, he was appointed as assistant chief, Section of Dental Health for the state of Minnesota (1950–57), and then director of the Division of Dental Health, North Dakota. Among the memberships, honors, and offices he has held in professional organizations are the following: chair, Section of Public Health (1961), and consultant, Council on Dental Therapeutics and Council on Dental Research for the American Dental Association; President of the North Dakota State Dental Association; president of the North Dakota Public Health Association; president of ASTDD (1971); president of the AAPHD (1968); and president of the ABDPH (1967).

He was a clinical examiner or investigator in 18 field tests of cariostatic agents, and has published many papers on fluoride and its therapeutic benefits during 1957–70. Because John could not be with us today, he has graciously donated the \$1,000 that accompanies this award to be used to further dental public health. I have suggested that this donation be used for the association's new fund to support dental public health education. Although John is not here, we do have with us two individuals who know John much better on a personal and professional basis than me. Hersch Horowitz and Kathy Mangskau have agreed to share some brief anecdotes, after which Dr. Horowitz will receive the Distinguished Service Award on behalf of Dr. Peterson.

Tribute to John K. Peterson Upon His Receiving AAPHD's Distinguished Service Award

Herschel S. Horowitz, DDS, MPH

It gives me great pleasure to have been asked to make a few remarks in connection with John Peterson's being given the 1998 Distinguished Service Award from the American Association of Public Health Dentistry. I respect John Peterson's accomplishments in dental research and public health and consider him a close colleague and friend.

I know John best as an epidemiologist and clinical field investigator who practiced during the halcyon days of clinical studies of dental caries prevention from the late 1950s to about 1980 (1). John built a reputation as a sober, reliable investigator and his services were sought by many industrial groups and government agencies to conduct studies on their behalf. He was a productive researcher, having done many studies of dental caries prevention using various fluoride dentifrices, prophylaxis pastes, professional applications, and phosphate additives to breakfast cereals.

John has excellent organizational and administrative skills and his studies always ran smoothly without hitches. He was innovative in improving field examination techniques, and was among the first, if not *the* first, clinical investigator in the United States to use a fiber optic light attached to a mouth mirror to provide transillumination of approximal tooth surfaces and a head lamp to provide general lighting of subjects' mouths.

I worked jointly with John on two studies. One was a study of examiner variability and the use of radiographs in determining the efficacy of community water fluoridation (2) and the



John K. Peterson

other was a two-year evaluation of an acidulated phosphate-fluoride prophylaxis paste (3). We always got along well together and, during those studies, we had many intellectually stimulating discussions on dental research and dental public health topics.

One of our studies was done in the adjoining cities of Moorhead, Minnesota, and Fargo, North Dakota. The annual examinations were scheduled sometime during the winter and boy, was it cold! Although I was born and reared in a northern climate (Detroit), Fargo-Moorhead in winter taught me what cold really meant. I recall bundling up in all the warm clothing I had brought with me, and on clear, cold nights going for long walks and waiting for the mucous membranes of my nasal passages to crackle in the cold. The examining teams from Minnesota and North Dakota usually had dinner together and often met for preprandial libations in someone's hotel

or motel room (the usual dental public health procedure for "cocktails" during that time, largely because of minuscule per diem rates). One night, John hosted the cocktail hour in his motel room. I was a very unsophisticated early thirty-something-year-old at the time, relatively unused to drinking. After a couple of drinks, I proceeded to sing loudly while jumping up and down on John's motel bed and generally using it as a trampoline. My antics really must have impressed John because, to this day, whenever he sees or talks to Alice or me, he invariably brings up my performance that night.

John has had an interesting and productive career. He is a native Minnesotan and after his formal education all done in Minnesota, in 1950, he became assistant chief, Section of Dental Health, Minnesota State Department of Health, working under Dr. William A. Jordan. Dr. Jordan served as Minnesota's state dental director for many years and conducted a host of important research studies and demonstration projects. He was recognized by the Oral Health Section of the American Public Health Association by receiving its prestigious John W. Knutson Award in 1988. John's experience in working with Bill Jordan undoubtedly was valuable to his future. In 1957 John became director, Division of Dental Health, North Dakota State Department of Health, a position he held until his retirement.

John was very active in various dental public health organizations. He served as a member of the American Board of Dental Public Health from 1963–67. He was president of AAPHD